

Listing of Claims

1. (Currently amended) In an emulator that includes printed circuit boards interconnected by a multi-conductor cable with inputs at one end of the cable and corresponding outputs at the other cable end, ~~an in-situ~~ a method for determining the length of the cable while the cable is installed in the emulator thereby interconnecting the printed circuit boards, including the step of:

prior to installing the cable, interchanging the inputs or outputs of at least one pair of conductors to denote a cable length;

~~programming the emulator to~~ inputting a test pattern to the cable comprised of binary data;

~~programming the emulator to~~ collecting an output data pattern from the cable that results from the test pattern;

determining the cable length from the output pattern;

compiling ~~the~~ an emulation program to account for each interchanged pair of conductors, the emulation program corresponding to a logical design for an integrated circuit.

2 (Currently amended) ~~An in-situ~~ The method for determining the length of the cable as in claim 1 wherein said test pattern is a pattern of alternating binary "1s" and "0s."

3 (Currently amended) ~~An in-situ~~ The method for determining the length of the cable as in claim 1 wherein one cable length is denoted by having no interchanged pair of conductors.

4 (Currently amended) ~~An in-situ~~ The method for determining the length of the cable as in claim 2 wherein one cable length is denoted by having no interchanged pair of conductors.

5. (New) A method for determining length of a multi-conductor cable installed in an emulation system, the emulation system having a first printed circuit board electrically communicating with a second printed circuit board via the multi-conductor cable so that the emulation system can execute an emulation program corresponding to a logic design, the multi-conductor cable having a plurality of inputs at one end and a corresponding plurality of outputs at the other end, comprising:

prior to installing the cable, interchanging the inputs or outputs of at least one pair of conductors to denote a cable length;

inputting a test pattern to the cable comprised of binary data;

collecting an output data pattern from the cable that results from the test pattern;

determining the cable length from the output pattern;

compiling the emulation program so that the interchanged pair of conductors is accounted for when the emulation program is run on the emulation system.